Claims

1. Method for reducing the interfering signals in an electro-optical measuring process wherein the coherence of a light beam is reduced before incidence on a photoreceiver (2) comprising an electro-optical mixer (6).

2. Method according to Claim 1 wherein a laser beam is used as the light beam.

3. Method according to one of the Claims 1 or 2 wherein a scattering unit (3) is used to reduce the coherence.

4. Method according to Claim 3 wherein an optical fiber is used as the scattering unit (3).

5. Method according to Claim 3 wherein a rough layer (8) applied to the electro-optical mixer (6) is used as the scattering unit (3).

6. Method according to Claim 3 wherein a diffusing lens is used as the scattering unit (3).

7. Method according to one of the Claims 1 to 6 wherein a current pulse modulation or excitation of several modes of a laser beam are embodied particularly within a laser diode.

8. Electro-optical mixing device with at least one light source (1) and one photoreceiver (2) wherein a coherence suppression of a laser beam before incidence on a photoreceiver (2) particularly an electro-optical mixer (6) is achieved by means of a coherence-reducing unit.

9. Device according to Claim 8 wherein the coherence-reducing unit is a scattering unit (3).

10. Device according to Claim 9 wherein the scattering unit (3) is an optical fiber.

11. Device according to Claim 9 wherein the scattering unit (3) is a diffusing lens.

12. Device according to Claim 9 wherein, a rough layer (8) is applied to a photoreceiver (2) as a scattering unit (3), particularly an electro-optical mixer (6).

13. Device according to Claim 12 wherein the rough layer (8) has scattering particles and / or a rough surface.

14. Device according to one of the Claims 9 to 13 wherein a housing (7) forms the photoreceiver (2) comprising in particular the electro-optical mixer (6) and the scattering unit (3'').

15. Device according to Claim 8 wherein the coherence-reducing unit is a light wave modulation unit.